Fall maintenance is an important homeowner duty because it helps make homes more energy efficient during the winter months, and will safeguard homes against potential seasonal 'disasters' such as leaking roofs or home fires due to neglected chimneys. Here are ten tips to a safer warmer winter.

- TIP #1 -- Check the heating system. Check the filter, pilot light and burners in a system fueled by gas or oil. Fireplaces, boilers, water heaters, space heaters and wood burning stoves should also be serviced every year. Filter changing is something homeowners can and should do themselves at least once every 2 months. Have the specialist inspecting your unit show you how to change the filter. Clean ducts in the heating system. Clean and vacuum dust from vents, baseboard heaters and cold air returns. Dust build-up in ducts is a major cause of indoor pollutants. Ducts should be professionally cleaned about every three years.
- TIP #2 <u>Have the chimney inspected by a qualified chimney professional</u>. Chimneys should be checked and cleaned, if necessary, on an annual basis. If you are using a wood stove this season, be sure that the stovepipe was installed correctly according to the manufacturer's recommendations and local codes. If there is any doubt, a building inspector or fire official can determine whether the system is properly installed. If you have a chimney that will not be used, consider having it sealed shut.
- TIP #3 -- Test fire alarms and smoke and carbon monoxide detectors. Often alarms and detectors go unattended. Batteries should be checked every six months to ensure that they're working. Vacuum out the dust.
- TIP #4 -- Remove excess leaves and damaged branches surrounding the house. Dead branches have the potential to break and fall, ruining roofs, decks, vehicles or people.
- TIP #5 -- Maintain gutters. Remove all debris that can slow or impede the ability of the water to drain effectively from the roof. Trapped water can be destructive not only to the gutters themselves but to the adjoining roof as well. Make sure gutter water drains away from your home.
- TIP #6 -- Inspect the roof. Look for damaged or loose shingles, gaps in the flashing at joints with siding, vents and flues, as well as damaged mortar around the chimney.
- TIP #7 -- Inspect exterior walls, doors and windows. Check walls and window sills for damage such as cracks, gaps, loose or crumbling mortar, along with splitting and decaying wood. Caulk exterior joints around windows and doors, which helps keep the home weather tight and lower heating bills. Check windows and doors to make sure locks work properly and that they are in good condition. Clean tracks and lubricate hinges. Repair or replace any cracked windows.
- TIP #8 -- Maintain steps and handrails. Repair broken steps and secure loose banisters and handrails. Broken steps can cause a dangerous fall. Similarly, a person slipping will grab a handrail for support.

## TIP #9 – Inspect the attic and basement or crawlspace.

Insulate Voids in the Attic - The entire attic floor above a living space should be insulated with at least 6 inches, except around electrical fixtures such as recessed lights that aren't rated for contact with insulation. Damp basements and crawl spaces can become mold and mildew problems. Watch for leaks from your hot water heater, plumbing system and seeping rain water. Locate and maintain a clear access to your main water shut off valve. If you have a sump pump, test, clean and lubricate it.

TIP #10 – Shut down sprinkler systems and outside faucets. Homeowners can shut down outside faucets, while the underground sprinkler system weatherizing is best performed by industry professionals to prevent cracked pipes by having the system flushed before the cold sets in.

Extra bonus tip - for those people who are planning to do some winter projects inside the house, such as painting or carpet renewing: Paint interior walls before it gets too cold to leave the windows open for ventilation from the smell or the fumes. The same goes for carpet cleaning or floor refinishing.

## Seal Up Cracks and Gaps by Applying Caulking and Weather-Stripping

If you were to measure the total space of the cracks, gaps and holes around the perimeter of an average home, you would find a hole that is roughly three feet square. Imagine how much heat can escape or moisture can enter through a space that large. To prevent these problems through these spaces, inspect the perimeter of your home and apply caulking or weather-stripping wherever necessary. Both caulking and weather stripping can reduce the flow of cold air in, warm air out and ultimately cut energy costs.

<u>How to caulk</u> - Clean surface by removing dirt, loose paint and old caulk and thoroughly dry surface. Determine which caulk to use based on the size of crack or gap and the surrounding material. Cut tip off tube of caulking at 45° angle and load into caulking gun. The nozzle is tapered, so the amount you cut off determines whether you have a thin, medium or heavy bead of caulk. Cut near the narrow end for a narrow bead or further up for a wider bead. Use a long nail to break the inner seal and plug the nozzle when finished. Apply caulk by laying a uniform bead of caulk overlapping both sides and completely fill the crack. Remove excess caulking and allow it to dry.

<u>Weather-stripping</u> - Apply weather-stripping at joints where two surfaces meet, such as windows and doors to provide an airtight seal. There are a few different types of weather stripping and each has its benefits and drawbacks. Once you choose the appropriate weather stripping, follow the instructions for proper application.

- <u>Tape</u> lasts only one year and should only be used on windows or doors that will not be opened. Tends to dry and loosen within one heating season
- <u>Felt</u> lasts only one or two years and should be used on top or side of doors or window frames for sealing gaps of uniformly narrow width
- <u>Foam</u> This is known as "backer rod" and looks like a foam tube in a roll. It comes in different diameters and lasts only one or two years and should be used on the bottom of window sashes or around the frames of warped or loose-fitting doors and windows.